## **CLAIMS**

1-20. (Cancelled)

- 21. (Original) A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:
  - (a) an electrochemical test strip comprising:
  - (i) a reaction zone defined by opposing working and reference metallic electrodes separated by a spacer layer, wherein at least one of said first and second metallic electrodes has a surface modified with a homogenous surface modification layer made up of self assembling molecules having a first sulfhydryl end group and a second sulfonate end group, wherein said sulfhydryl and sulfonate end groups are separated by a lower alkyl linker group; and
  - (ii) a redox reagent system present in said reaction zone, wherein said redox reagent system comprises at least one enzyme and a mediator; and(b) at least one of:
    - (i) a means for obtaining said physiological sample; and
    - (ii) an analyte standard.
- 22. (Original) The kit according to claim 21, wherein said analyte is glucose.
- 23. (Original) The kit according to claim 21, wherein said physiological sample is blood.
- 24. (Original) The kit according to claim 21, wherein said means for obtaining said physiological sample is a lance.
- 25. (Original) The kit according to claim 21, wherein said kit further comprises an automated instrument for detecting an electrical signal using said electrodes and relating said detected signal to the amount of analyte in a sample.

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26. (Previously Presented) A system for use in determining the concentration of an analyte in a physiological sample, said system comprising:

- (a) an electrochemical test strip comprising:
  - (1) a reaction zone defined by opposing working and reference metallic electrodes separated by a spacer layer, wherein at least one of said first and second metallic electrodes has a surface modified with a homogenous surface modification layer made up of self assembling molecules having a first sulfhydryl end group and a second sulfonate end group, wherein said sulfhydryl and sulfonate end groups are separated by a lower alkyl linker group; and
- (2) a redox reagent system present in said reaction zone, wherein said redox reagent system comprises at least one enzyme and a mediator; and(b) an automated instrument.